

Population Study of Canada Geese in Jackson Hole, Wyoming
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Censuses of the Canada goose population in Jackson Hole were made several times during the period September 1, 1962 and August 31, 1963. The greatest numbers of geese were present in September (855) and August (813). The population was lowest in mid-winter when 252 geese were located (February census).

An estimated 355 geese were present in the breeding population, of which 47 per cent were adults. Fifty nests were located; 46 per cent were successful in producing goslings. The mean number of eggs per completed clutch was 4.9 and the mean brood size was 4.5 goslings. Islands were selected most frequently for nest sites (64 per cent). Specific cover types utilized for nesting were shrubby (30 per cent) and driftwood (26 per cent). The first nest was initiated March 23, with the peak of nest initiation occurring during April 1-15. The peak of hatching occurred May 1-20 and the last active nest was destroyed June 21. In that portion of the study area from Jackson Lake southward the length of the nesting period was 91 days.

An experiment to develop a field technique for estimating the incubation stage of goose eggs was conducted. The technique was moderately reliable when combined with field observations at the nest site. Goslings obtained from the incubation experiment were reared at the Biological Research Station and photographed at weekly intervals. Age-specific characters were recorded in an attempt to develop a technique for aging goslings in the field.

Patterns of water release from Jackson Lake were compared with data concerning inflow of water into the lake. During most years since 1954, the dam delayed and/or decreased the flood crest in the Snake River below Jackson Lake.

Life tables were constructed for Canada geese banded at Turbid Lake in Yellowstone Park. Additional banding was done at Turbid Lake, and 284 geese were color-marked, sexed and aged.

Several observations were made of neck-banded geese in Jackson Hole during August. These observations were utilized in a Lincoln Index estimation of the population migrating through Jackson Hole during autumn (2292 geese). This result compared favorably with the result from a method which utilized the ratio of non-breeding to breeding geese combined with reproductive data (2618 geese).

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